Report Date: 02 Feb 2013

Summary Report for Individual Task 052-221-1010 Place Explosive Urban Breaching Charges Status: Approved

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**Condition:** Given a target to breach explosively, a constructed urban breaching charge and a determined point of entry to breach. This task should not be trained in MOPP.

**Standard:** Place a selected urban breaching charge so that when detonated defeats the target while limiting the amount of collateral damage, and minimizes the exposure of the team to the fatal funnel.

Special Condition: None

Special Standards: None

Special Equipment: None

MOPP: Never

### **Task Statements**

Cue: Place Explosive Urban Breaching Charges

# None WARNING None

# **CAUTION**

None

Remarks: None

**Notes:** Prior to placement of charges gather required material for the type of charge being placed. For a "C" charge, go to performance step 1. For a silhouette charge, go to performance step 2. For a detonating cord linear charge, go to performance step 3. For a rubber strip charge, go to performance step 4. For a water impulse charge, go to performance step 5.

NOTE: The "C" Charge is a cutting charge used primarily for interior or exterior wooden doors. The charge is designed to cut around the doorknob/deadbolt, which in turn defeats the locking mechanism. It will work against doors with just a door knob lock as well as one with both a locking knob and a deadbolt.

- 1. Place a "C" charge.
  - a. Attach the detonating system.
    - (1) Remove the protective cover from the double-sided tape just prior to placing the charge.
- (2) Push the star previously cut in the backing material, adhesive side down, over doorknob. Ensure the open side of the "C" faces the door edge.
  - (3) Press the charge tightly against the door ensuring the double-sided tape is adhered to the door.
  - b. Attach the initiation system.
- (1) Turn the screw caps of the two fuse igniters counterclockwise and remove both the shipping plugs from the igniters.
- (2) Cut off the sealed end of the blasting cap assembly and attach to the fuse igniters with the safety pins facing the same direction.
  - (3) Tape the blasting cap assemblies together every 12 to 18-inches.
- (4) Fold in half a 12-inch piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.
  - (5) Tape the two blasting caps onto the bottom of the loop on each side.
- (6) Reverse a 1-inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (7) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.

Note: The initiation system is completed the same for each charge with the exception of the doughnut charge.

c. Prepare to detonate the charge.

Note: The charge will cut around the doorknob and dead bolt removing this section from the door that will defeat the locks and blow the door open.

(1) Stand against the wall on the side of the door that has the knob at a safe distance as determined by the breach team leader.

# **CAUTION**

THE DOORJAMB WILL BE THE PROTECTIVE SHIELDING WHEN THE CHARGE IS FIRED. THERE IS A CHANCE THAT IF THE DETONATION CORD CONNECTOR CAN BE SEEN INJURIES COULD OCCUR BY BLASTING FRAGMENTATION.

- (2) Upon command from the breach team leader, fire the charge.
- 2. Place a Silhouette charge.

Note: Used on doors or walls between studs. Usually will drop the cutout material straight down at the entry point if the correct weight explosive has been used.

- a. Attach the charge to the target, "head" side down.
  - (1) Remove the cover from the double-sided tape using the pull-tab created during the charge construction.
- (2) Push the charge backing material; adhesive side down, against the target ensuring the double-sided tape is adhered to the target.

# WARNING

PLACING THE CHARGE HIGHER THAN 1 FOOT FROM THE FLOOR WILL CREATE A TRIPPING HAZARD.

NOTE: For heavier charges, use the non-metallic prop stick. Place one end of the stick against the charge at the position created during construction. Place the other end on the ground and push it towards the target to "prop" the charge against the target.

(3) On doors place the charge centered on the door. For doors over eight feet, place the charge approximately 1 foot from the floor.

# **WARNING**

A PROP STICK MAY PRODUCE SECONDARY FRAGMENTATION UP TO 100 METERS TO THE REAR.

- (4) On walls place the charge approximately 1-foot from the floor. Locate the wall studs prior to placement of the charge. The charge is 19-inches wide, when constructed from an E-silhouette; the center of the charge should be centered between the studs regardless of the stud spacing. Wall studs are normally spaced at 16 to 24-inches on center.
  - b. Attach the initiation system.
- (1) Turn the screw cap of the two fuse igniters counterclockwise and remove both the shipping plug from the igniters.
- (2) Cut off the sealed end of the branch lines and attach to the fuse igniters with the safety pins facing the same direction.
  - (3) Tape the blasting cap assemblies together every 12 to 18-inches.
- (4) Fold in half a 12-inch piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.
  - (5) Tape the two blasting caps onto the bottom of the loop on each side.
- (6) Reverse a 1inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (7) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.
  - c. Prepare to detonate the charge.

- (1) Stand at a safe distance from the charge.
- (2) Upon command of the breach team leader, fire the charge.
- 3. Place a detonating cord linear charge.

Note: The charge can be placed on the hinge side, doorknob side, or in the center of the door. If placed toward the door edge do not place it closer than four inches from the edge. Exact placements will determine the result of the cut.

### a. Place hinge side.

Note: Hinge side placement removes the hinges from the door allowing the remaining portion of the door to fall inside the target structure. This may be considered a hindrance to entry.

- (1) Attach the charge to the target.
- (a) Pull the buddy tab down slightly from the top of the charge to remove the protective cover and expose the adhesive and begin attaching the charge at the top of the door, four inches in from the edge of the door.
- (b) Continue to place the charge downward along the door's edge with the lower end of the charge in the corner below the lowest door hinge. The initiation point will be at the bottom of the door.
  - (2) Attach the initiation system.
- (a) Turn the screw cap of the two fuse igniters counterclockwise and remove both the shipping plug from the igniters.
- (b) Cut off the sealed end of the branch lines and attach to the fuse igniters with the safety pins facing the same direction.
  - (c) Tape the blasting cap assemblies together every 12 to 18-inches.
- (d) Fold in half a 12-inch piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.
  - (e) Tape the two blasting caps onto the bottom of the loop on each side.
- (f) Reverse a 1inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (g) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.
  - (3) Prepare to detonate the charge.
    - (a) Stand at a safe distance from the charge as determined by the breach team leader.
    - (b) Upon command of the breach team leader, fire the charge.
  - b. Place knob side.

Note: Knob side placement cuts the door and allows the door to swing open. This leaves most of the door in the frame and may allow the door to swing and obstruct the assault team.

(1) Attach the charge to the target.

- (a) Pull the buddy tab down slightly from the top of the charge and begin attaching the charge to the top of the door starting at the doorjamb on the interior side of the door knob.
- (b) Continue to place the charge downward along the door's edge with the lower end of the charge in the corner below the doorknob and the other end resting on the doorjamb. The initiation point will be at the bottom of the door.

Note: Space may not be available to place the charge directly over the locking mechanism running parallel to the door frame. Place the charge as close to the mechanism as possible to cut the door and allow entry.

### (2) Attach the initiation system.

Note: The initiation devices used are an important part of urban breaching. The charges used should be command detonating and all charges should be dual initiated.

- (a) Turn the screw cap of the two fuse igniters counterclockwise and remove both the shipping plug from the igniters.
- (b) Cut off the sealed end of the branch lines and attach to the fuse igniters with the safety pins facing the same direction.
  - (c) Tape the blasting cap assemblies together every 12 to 18-inches.
- (d) Fold in half a 12-inch piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.
  - (e) Tape the two blasting caps onto the bottom of the loop on each side.
- (f) Reverse a 1inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (g) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.
  - (3) Prepare to detonate the charge.
    - (a) Stand at a safe distance from the charge.
    - (b) Upon command of the breach team leader, fire the charge.

### c. Place centered.

Note: When placing the charge vertically, centered on the door, the door is cut in half, removed from the frame and propelled within the structure. This could create fragmentation within the structure and also a hazard to movement for the assault team.

- (1) Attach the charge to the target.
  - (a) Pull the buddy tape down slightly from the top of the charge and begin attaching the tape to the door.
- (b) Continue to place the charge vertically down the center of the door with the lower end at the bottom of the door. The initiation point will be at the lowest portion of the charge.
  - (2) Attach the initiation system.
- (a) Turn the screw cap of the two fuse igniters counterclockwise and remove both the shipping plug from the igniters.

- (b) Cut off the sealed end of the branch lines and attach to the fuse igniters with the safety pins facing the same direction.
  - (c) Tape the blasting cap assemblies together every 12 to 18-inches.
- (d) Fold in half a 12-inch piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.
  - (e) Tape the two blasting caps onto the bottom of the loop on each side.
- (f) Reverse a 1-inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (g) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.
  - (3) Prepare to detonate the charge.
    - (a) Stand at a safe distance from the charge.
    - (b) Upon command of the breach team leader, fire the charge.
- 4. Place a Rubber Strip charge.

Note: The rubber strip charge can defeat the locking mechanism of wooden or metal doors and windows. When used on a door, the charge dislodges the locking mechanism from the frame and/or door. When used on a window, the rubber strip charge pushes the window sash or glass from the frame thus creating a hole of entry without creating a large amount of fragmentation. The design of the charge causes the explosives to detonate and in turn pushes a non-explosive medium (rubber) through the target. It is this pushing effect, which limits the collateral damage created within the structure.

- a. Place on door.
  - (1) Attach the charge to the target.
    - (a) Remove the protective cover from the double-sided tape by pulling the buddy tab created.
- (b) Place the charge on the door, with the rubber side of the charge facing the target, between the doorknob, any other locking mechanism, and the doorjamb.
  - (c) Add additional tape, if necessary, to secure the charge to the door.
  - (2) Attach the initiation system.
- (a) Turn the screw cap of the two fuse igniters counterclockwise and remove both the shipping plug from the igniters.
- (b) Cut off the sealed end of the branch lines and attach to the fuse igniters with the safety pins facing the same direction.
  - (c) Tape the blasting cap assemblies together every 12 to 18-inches.
- (d) Fold in half a 12-inch piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.
  - (e) Tape the two blasting caps onto the bottom of the loop on each side.

- (f) Reverse a 1inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (g) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.
  - (3) Prepare to detonate the charge.
    - (a) Stand at a safe distance from the charge.

# WARNING

THE DOORJAMB WILL BE THE PROTECTIVE SHIELDING WHEN THE CHARGE IS FIRED. THERE IS A CHANCE THAT IF THE DETONATION CORD CONNECTOR CAN BE SEEN INJURIES COULD OCCUR BY BLASTING FRAGMENTATION.

- (b) Upon command of the breach team leader, fire the charge.
- b. Place on window.
  - (1) Attach the charge to the target.
    - (a) Remove the protective cover from the double-sided tape by pulling the buddy tab created.
- (b) Place the charge on the window, with the rubber side of the charge facing the target. The type of window will determine the placement of the charge.

Casement window: Casement windows have side hinges. Place the charge vertically on the mullion (the construction between the openings of a window frame to accommodate two or more windows). This placement will remove the mullion and break the glass.

Light residential window: Place on one side stile. Ensure that the charge overlaps the meeting rail and sash. It is not necessary for the entire length of the charge to be touching the window stile.

Heavier store type window: Place the charge on the bottom of the window in the corner. The detonation pushes the medium through the target, removing the glass from the bottom of the window. The window will fall down under its on weight.

Note: Be prepared to break and rake any glass left in the window frame.

NOTE: If attacking a larger window two charges placed end-to-end may be needed.

- (c) Add additional tape if necessary to secure the charge to the window.
- (2) Attach the initiation system.
- (a) Turn the screw cap of the two fuse igniters counterclockwise and remove both the shipping plug from the igniters.
- (b) Cut off the sealed end of the branch lines and attach to the fuse igniters with the safety pins facing the same direction.
  - (c) Tape the blasting cap assemblies together every 12 to 18-inches.
- (d) Fold in half a 12-inch piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.

- (e) Tape the two blasting caps onto the bottom of the loop on each side.
- (f) Reverse a 1-inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (g) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.
  - (3) Prepare to detonate the charge.
    - (a) Stand at a safe distance from the charge.
    - (b) Upon command of the breach team leader, fire the charge.
- 5. Place a Water Impulse charge.

Note: The water impulse charge utilizes the hydrodynamic properties of water to defeat the intended target. The charge is primarily used to open light metal to light steel doors and may be used on heavy wooden doors if placed on the locking mechanism.

- a. Attach the charge to the target.
  - (1) Cut a prop stick to an appropriate length and notch it in the middle to hold the 550 cord.
  - (2) Attach the charge to the target using one of the following methods.
- (a) Inward opening wooden doors: Place the charge sitting on top of the doorknob and prop with stick. This will allow for more support of the charge with the capability to defeat the door even if it has a dead bolt.
  - (b) Metal doors: Place the charge centered both horizontally and vertically on the door.

Note: The normal tendency is to place the charge too high. It takes practice to ensure proper placement of the charge. When fired the hydraulic pressure buckles the center of the door causing the locking/closing mechanism to slide out of the strike plate thus opening the door. In most cases, it will rip the entire door from the frame.

- (c) Outward opening doors: Place the charge centered horizontally and vertically on the door. As with the inward opening door, the door will buckle. In this case the door will bounce off the door jam and open.
- (d) Metal security doors: A metal security door is constructed of 14 or 16-gauge steel and contains steel ribs running vertically between the door panels. To defeat this style of door place the charge next to the locking mechanism. A centered charge will not defeat this door because the ribs strengthen the door and keep it from buckling. Placing the charge next to the locking mechanism defeats the locking mechanism and allows the door to open.

# **WARNING**

A PROP STICK MAY PRODUCE SECONDARY FRAGMENTATION UP TO 100 METERS TO THE REAR. THE DOORKNOB AND LOCKING MECHANISM ARE MISSILE HAZARDS.

- (e) Screen doors: Place the charge directly on the screen door in the position it would be placed for the type of door located behind the screen door.
  - b. Attach the initiation system.

Note: The initiation devices used are an important part of urban breaching. The charges used should be command detonating and all charges should be dual initiated.

- (1) Turn the screw cap of the two fuse igniters counterclockwise and remove both the shipping plug from the igniters.
- (2) Cut off the sealed end of the branch lines and attach to the fuse igniters with the safety pins facing the same direction.
  - (3) Tape the blasting cap assemblies together every 12 to 18-inches.
- (4) Fold in half a 12-inch piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.
  - (5) Tape the two blasting caps onto the bottom of the loop on each side.
- (6) Reverse a 1-inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (7) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.
  - c. Prepare to detonate the charge.
    - (1) Stand at a safe distance from the charge.
    - (2) Upon command of the breach team leader, fire the charge.
- 6. Place a Doughnut charge.

Note: The doughnut charge is the only urban explosive charge that will be single primed.

- a. Attach to charge to target.
- (1) Place the detonating cord loop over the doorknob so that the Uli knot is between the doorknob and the doorjamb.
  - (2) Position the Uli knot over the throw of the knob.
  - (3) Slide the tape knot toward the loop so that the loop is tightened onto the doorknob.
  - b. Attach the initiation system.
    - (1) Turn the coupling of the fuse igniter counterclockwise and remove the shipping plug from the igniter.
- (2) Cut off the sealed end of the blasting cap assembly and attach to the fuse igniter with the safety pins facing the same direction.
- (3) Use the tails of the detonating cord to attach the initiating system using an M9 or tape the blasting caps directly to the detonating cord.
  - c. Prepare to detonate the charge.
    - (1) Stand at a safe distance from the charge as determined by the breach team leader.
    - (2) Upon command from the breach team leader, fire the charge.

7. Place a Uli knot slider charge.

Note: Depending on the situation, remove the protective backing either in the safe area or at the target.

- a. Attach the charge to the target.
  - (1) Pull the buddy tab off each rubber strip.
  - (2) Attach the charges parallel to the hinges starting with the top hinge.
    - (a) Hinges exposed: Begin attaching the charge parallel to the hinges starting with the top hinge.
- (b) Hinges not exposed: Place the charge bodies on the door as close to the suspected hinge positions starting with the top hinge.

Note: Typical hinge placement on doors; top hinge, about 6 to 8 inches or one hand length down from the top, center hinge, centered on the door, across for door knob, and bottom hinge about boot top high.

- (3) Continue to place the charge vertically down the door. The initiation point will be the lowest portion of the charge.
  - b. Attach the initiation system.
- (1) Turn the screw caps of the two fuse igniters counterclockwise and remove both the shipping plugs from the igniters.
- (2) Cut off the sealed end of the blasting cap assembly and attach to the fuse igniters with the safety pins facing the same direction.
  - (3) Tape the blasting cap assemblies together every 12 to 18 inches.
- (4) Fold in half a 12-inches piece of detonating cord and tape together at the bottom so that the detonating cord forms a loop.
  - (5) Tape the two blasting caps onto the bottom of the loop on each side.
- (6) Reverse a 1-inch piece of duct tape and tape onto the bottom of the loop. This will allow the tape to slide up and down.
- (7) Place onto the tails of detonating cord at the base of the charge and tighten by sliding the tape up onto the charge.
  - c. Prepare to detonate the charge.
    - (1) Stand at a safe distance from the charge as determined by the breach team leader.
    - (2) Upon command from the breach team leader, fire the charge.

(Asterisks indicates a leader performance step.)

Evaluation Preparation: Setup: Provide the Soldier with a mission for placement of explosive urban charges.

Brief Soldier: Tell the Soldier to place all 7 explosive urban charges and demonstrate proficiency on attaching the initiation system to detonate.

PERFORMANCE MEASURES		NO-GO	N/A
1. Placed a "C" charge.			
2. Placed a Silhouette charge.			
3. Placed a detonating cord Linear charge.			
4. Placed a Rubber Strip charge.			
5. Placed a Water Impulse charge.			
6. Placed a Doughnut charge.			
7. Placed a Uli knot slider charge.			

## **Supporting Reference(s):**

Step Number	Reference ID	Reference Name	Required	Primary
	ATTP 3-06.11	Combined Arms Operations in Urban Terrain	No	No
	FM 3-06	Urban Operations	No	No
	FM 3-34.214	Explosives and Demolitions	Yes	No

**Environment: NONE** 

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, NBC Protection, FM 3-11.5, CBRN Decontamination. Observe all warnings and cautions.

Prerequisite Individual Tasks: None Supporting Individual Tasks: None

**Supported Individual Tasks:** 

Task Number	Title	Proponent	Status
052-221-3002	Complete an Urban Breaching Report	052 - Engineer (Individual)	Analysis Completed

### **Supported Collective Tasks:**

Task Number	Title	Proponent	Status
07-2-1261	Conduct an Attack in an Urban Area (Platoon-Company)	07 - Infantry (Collective)	Approved

### ICTL Data:

ICTL Title	Personnel Type	MOS Data
Cavalry Scout, SL3	Enlisted	MOS: 19D, Skill Level: SL3
19D30 Cavalry Scout, Version 1.00	Enlisted	MOS: 19D, Skill Level: SL3
12B10 Critial Task List	Enlisted	MOS: 12B, Skill Level: SL1, Duty Pos: KBQ
Urban Mobility Breaching Course	Enlisted	MOS: 12B, Skill Level: 0